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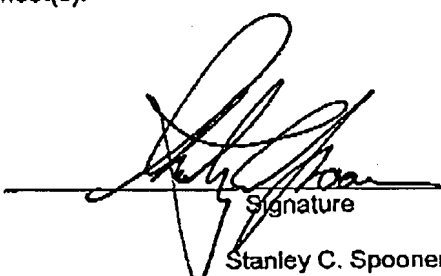
PTO/SB/33 (07-05)

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| PRE-APPEAL BRIEF REQUEST FOR REVIEW   |  | Docket Number (Optional) |  |
|---|--|--------------------------|--|
|   |  | SCS-540-508              |  |
| Application Number  |  | Filed                    |  |
| 10/500,623  |  | July 2, 2004             |  |
| First Named Inventor  |  | WESTCOTT                 |  |
| Art Unit  |  | Examiner                 |  |
| 2836  |  | C. Amaya                 |  |
| <p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s).<br/>Note: No more than five (5) pages may be provided.</p> <p>I am the<br/><input type="checkbox"/> Applicant/Inventor<br/><input type="checkbox"/> Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)<br/><input checked="" type="checkbox"/> Attorney or agent of record <u>27,393</u><br/>(Reg. No.)<br/><input type="checkbox"/> Attorney or agent acting under 37CFR 1.34.<br/>Registration number if acting under 37 C.F.R. § 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*</p> <p><input checked="" type="checkbox"/> *Total of 1 form/s are submitted.</p> |  |                          |  |

  
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June 15, 2007  
Date

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**STATEMENT OF ARGUMENTS IN SUPPORT OF  
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**Error #1. The Examiner fails to identify any teaching in the Dyer reference which discloses or even suggests Applicant's claimed "voltage sensor" or "generating" step of a signal "with reference to an indication of the DC supply voltage"**

Applicant's independent claim 1 requires a "voltage sensor for producing a signal indicative of said DC supply voltage" and independent method claim 13 requires the step of "generating" a second switching signal "with reference to an indication of the DC supply voltage." On page 3, lines 1-4 of the Final Rejection, the Examiner alleges that co-axial shunt 27 in Dyer (U.S. Patent 4,585,986) teaches the claimed "voltage sensor" and, with respect to independent claim 13, a second switching signal "with reference to an indication of the DC supply voltage." This is incorrect.

In Fig. 1 of Dyer, the DC supply voltage is provided by the "144 volt battery bank 7." Contactor switch 9 connects and disconnects the battery bank (and consequently the supply voltage) from the remaining circuitry. When contactor switch 9 is open, the "measurement device 27" identified by the Examiner (which is actually co-axial shunt 27) is disconnected from battery bank 7 and thus cannot provide any indication of the DC Supply Voltage. Instead, at column 4, lines 3-18, the "co-axial shunt 27" provides "a voltage signal proportional to the load current" flowing through inductor 5.

The Examiner provides no explanation of how "a voltage signal proportional to the load current" provides any indication of the DC supply voltage. As is well known, current flow through an inductor can be maintained even while the DC supply voltage is disconnected (examples of this are current flow in a superconducting coil). The Examiner identifies no disclosure that suggests that co-axial shunt 27 develops any voltage indicative of the DC supply voltage.

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The same arguments are true with respect to claim 13 which requires a second switching signal generated "with reference to an indication of the DC supply voltage." The Examiner refers to Dyer at column 4, lines 24-27. However, this portion of Dyer states "this voltage is compared with a current demand signal reference voltage," but there is no "indication of the DC supply voltage" provided by battery bank 7.

As a result, because the Examiner fails to indicate where Dyer teaches elements and method steps positively recited in apparatus claim 1 and method claim 13 and claims 6, 9-12 and 14-34 respectively dependent thereon, the rejection under 35 USC §102 clearly fails.

**Error #2. The Examiner fails to allege that the "voltage sensor" and "generating" steps missing from the Dyer reference are disclosed in any other cited prior art reference**

The Examiner bases his rejections of claims 16-18, 22, 26, 29, 33 and 34 under 35 USC §103 as being unpatentable over Dyer in view of various references to Durif (U.S. Patent 6,504,698), Wilcox (U.S. Patent 5,847,554), Ramarathnam (U.S. Patent 6,316,895) and Smedley (U.S. Patent 5,559,467). The above comments distinguishing the Dyer reference from independent claims 1 and 13 and all remaining claims dependent thereon are herein incorporated by reference. In none of the obviousness rejections does the Examiner allege that any of the secondary references discloses the missing "voltage sensor" of independent claim 1 or the "generating" step "with reference to an indication of the DC supply voltage" as in claim 13.

The Examiner is reminded that the Court of Appeals for the Federal Circuit has held that "the PTO has the burden under §103 to establish a *prima facie* case of obviousness." *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). "It can satisfy this burden only by showing some objective teaching in the prior art . . . ." Because no cited reference teaches the element of claim

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1 or the “generating” step of 13, the Patent Office has failed to meet its burden of establishing a *prima facie* case of obviousness with respect to all obviousness rejections under §103.

**Error #3. The Examiner fails to identify any “reason” or “motivation” for combining references**

The Court of Appeals for the Federal Circuit has consistently held that in an obviousness rejection, the Patent Office must disclose some “reason” for combining references. This was confirmed in a recent Memorandum from Deputy Commissioner for Patent Operations Margaret A. Focarino on May 3, 2007, in which she said “in formulating a rejection under 35 USC §103(a) based upon a combination of prior art elements, it remains necessary [for the examiner] to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” In each of the obviousness rejections, the Examiner merely concludes that it would be obvious to combine elements from the prior art references, but provides no “reason” or “motivation” for doing so. Accordingly, the Examiner has failed to set out a *prima facie* basis for obviousness in the rejections of sections 5-7 in the Final Rejection.

**Error #4. The Examiner errs in failing to appreciate that the Dyer reference teaches a load monitoring sensor and not a DC supply voltage sensor**

As noted above, the primary reference Dyer teaches that the co-axial shunt 27 is for developing “a voltage signal proportional to the load current.” Because the load current feeding an inductor does not reflect the DC supply voltage, the Dyer reference clearly teaches away from any supply voltage sensing. The Court of Appeals for the Federal Circuit has also opined that it is “error to find obviousness where references ‘diverge from and teach away from the invention at hand’.” *Id.* Because none of the references teach the use of a supply voltage sensor and because Dyer teaches away from a supply voltage sensor and suggests instead a load current

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sensor, the prior art teaches away from the invention at hand. This is strong evidence of non-obviousness of the claims, clearly rebutting any *prima facie* case of obviousness set out in sections 5-7 of the Final Rejection.

**Error #5. The Examiner errs in citing prior art which is not available prior art under 35 USC §103(c)**

In paragraph 9 of the Final Rejection, the Examiner rejects claims 1, 6, 11, 13-20 and 23-34 based upon obviousness-type double patenting over Westcott '567 (U.S. Patent 7,187,567) in view of Dyer. Inasmuch as Dyer fails to teach, and indeed teaches away from, Applicant's claimed combination, as noted above, the Dyer reference would lead one of ordinary skill in the art away from Applicant's claimed combination.

The Examiner's attention is directed to 35 USC §103(c). It will be seen that the presently claimed application and the Westcott '567 patent are both assigned to the same entity, i.e., BAE Systems plc. As a result, Westcott is simply not available as a reference in any obviousness rejection of the claims in this application.

**Error #6. The Examiner's admission that Westcott '567 fails to teach the claimed voltage sensor**

The Examiner alleges that Westcott discloses the switching circuit as claimed "except for the voltage sensor for producing a signal indicative of a voltage indicative of the DC supply." Again, this admission is very much appreciated and, as noted above, Dyer fails to disclose such a voltage as well.

Thus, even if Westcott '567 is available as a reference, and even if it were obvious to combine, the combination of Westcott '567 and Dyer does not teach the claimed subject matter of Applicant's independent claims 1 and 13 or claims dependent thereon. Accordingly, there is no *prima facie* case of obviousness-type double patenting over Westcott '567 in view of Dyer.

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### SUMMARY

As discussed above, the Dyer reference not only fails to teach claimed elements from Applicant's independent claims 1 and 13, it would actually lead one of ordinary skill in the art away from the use of a voltage sensor to provide an indication of the DC supply voltage and instead would suggest a current sensor which provides "a voltage signal proportional to the load current." Therefore, the rejection under §102 clearly fails. Additionally, the Examiner fails to allege that any other cited prior art reference contains the missing "voltage sensor" teaching. Thus, even if the obviousness references were combined as suggested by the Examiner, they fail to establish a *prima facie* case of teaching all claimed elements. However, the Examiner has failed to provide any "reason" for combining the references and indeed appears to have ignored the fact, as noted above, that Dyer teaches away from the cited prior art.

The Examiner also appears to have cited Applicant's own patent, Westcott '567, which is not available as prior art under 35 USC §103(c), but, even if it was available, the Examiner admits that Westcott does not teach the claimed voltage sensor. This admission, coupled with the above noted fact that Dyer fails to teach any voltage sensor, establishes that there is no basis for a *prima facie* case of obviousness under the obviousness-type double patenting rejection.

As a result of the above, there is simply no support for the rejection of Applicant's independent claims 1 and 13 or claims 6, 9-11 and 14-34 dependent thereon under 35 USC §102 or §103. Applicant respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.